REMARKS

The Office Action dated February 5, 2008 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 25, 27, 28, 42-49 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claims 50-68 are newly added. No new matter has been added and no new issues are raised which require further consideration or search. Claim 25-68 are presently pending.

Claims 25, 28-40, 42-44, 46, and 47 were rejected under 35 U.S.C. §103(a) as being unpatentable over Cidon et al. (Control Mechanism for High Speed Networks) in view of Yum et al. (Multicast source Routing I Packet-Switched Networks). The Office Action took the position that Cidon discloses all of the elements of the claims, with the exception of generating of updating information. The Office Action then cited Yum as allegedly curing this deficiency in Cidon. Applicants respectfully submit that Cidon and Yum together fail to teach each of the claim recitations of any of the currently pending claims. This rejection is respectfully traversed for at least the following reasons.

Claim 25 recites a method including determining, based on topology information of a radio access network, a spanning tree of routing paths corresponding to shortest paths from a network node to other nodes, detecting a network parameter change in a network node of the network, and distributing network parameter information indicating the network parameter change from the network node to the other nodes in accordance

with the spanning tree. The network node is configured to generate, for each of its offspring nodes, a respective updating information and to send the respective updating information to all offspring nodes. The respective updating information sent to the offspring nodes differs for each offspring node based on the spanning tree structure.

Claim 42 recites a network node for distributing a network parameter information to other network nodes of a transmission network. The network node is configured to detect a change in a network parameter related to the network node. The network node is further configured to distribute the network parameter information indicating the network parameter change towards the other network nodes in response to the detection and in accordance with a spanning tree of routing paths corresponding to shortest paths from the network node to the other nodes. The network node is further configured to generate for each of its offspring nodes a respective updating information and to send the respective updating information to all offspring nodes. The updated information is sent to the other nodes and the updated information differs for each of the other nodes based on the spanning tree topology.

Claim 46 recites a network node for distributing a network parameter information to other network nodes of a radio access network. The network node is configured to receive a network parameter information from an upper node, to update a stored parameter information according to the received network parameter information, and to distribute the network parameter information to its offspring network nodes based on a branch information included in the network parameter information. The branch

information is derived from a spanning tree routing topology. The network node is configured to update the branch information in the network parameter information before distributing the network parameter information to the other nodes. The updated information is sent to the other nodes and the updated information differs for each of the other nodes based on the spanning tree topology.

Claim 49 recites a system that includes determining means for determining, based on topology information of a radio access network, a spanning tree of routing paths corresponding to shortest paths from a network node to other nodes. The method includes detecting means for detecting a network parameter change in a network node of the network. The method also includes distributing means for distributing network parameter information indicating the network parameter change from the network node to the other nodes in accordance with the spanning tree. The network node is configured to generate, for each of its offspring nodes, a respective updating information and to send the respective updating information to all offspring nodes. The respective updating information sent to the offspring nodes differs for each offspring node based on the spanning tree structure.

As will be discussed below, Cidon in view of Yum fails to disclose or suggest every claim feature recited in claims 25, 28-40, 42-44, and 46-49, and therefore fails to provide the features discussed above.

Applicants respectfully submit that Cidon and Yum, taken individually, or in combination fail to teach or suggest "wherein said network node is configured to

generate, for each of its offspring nodes, a respective updating information and to send said respective updating information to all offspring nodes...wherein the respective updating information sent to the offspring nodes differs for each offspring node based on the spanning tree structure", as recited, in part, in independent claims 25, 42, 26 and 49-52.

Cidon discloses packet-switched networks with a header-based routing system. The topology broadcast algorithm disclosed in Cidon uses a spanning tree structure described in connection with the PARIS system. In contrast to the teachings of Cidon, the present application discloses distributing network parameter information in a radio access network. In one example, the signaling between IP base stations is performed via an interface supporting both control plane signaling and user plane traffic (please see page 6, second paragraph, of the original application).

The topology broadcast scheme described in Cidon is implemented as a header-based routing mechanism, each desired route along the spanning tree structure can be set by modifying corresponding header addresses. The topology update messages sent by an initial network node are the same for each neighbor node within the topology spanning tree. Furthermore, the neighbor nodes merely forward the received topology update message over the other tree links (please see page 0263, left hand column, last paragraph of Cidon).

In contrast to the disclosure of Cidon, independent claims 25, 42, 26 and 49-52 recite "wherein said network node is configured to generate, for each of its offspring

nodes, a respective updating information and to send said respective updating information to all offspring nodes...wherein the respective updating information sent to the offspring nodes differs for each offspring node based on the spanning tree structure." As the claim recitations suggest, a network node generates for each of its offspring nodes respective updating information which is individually generated for each of the offspring nodes based on the topology information stored at the network node. The network parameter information sent to the offspring nodes is different for each offspring node based on the spanning tree structure. None of the teachings disclosed in Cidon of Yum suggest providing dedicated network parameter information for each offspring node.

As stated above, Cidon describes several control mechanisms for high speed networks and a topology broadcast function using a spanning tree structure is merely mentioned as one of a plurality of possible algorithms which may be used. The teachings of Cidon to not teach all of the subject matter recited in the claims, however, Yum fails to cure those deficiencies of Cidon with respect to the claims.

Yum discloses a multicast source routing mechanism where a spanning tree structure is used for source routing multicast packets to provide a point-to-multipoint transmission. Yum is directed to an address coding mechanism for multicast source routing packets in packet-switched networks. Yum discloses an algorithm for processing these address codes at intermediate output link adaptors, which involves only the recognition of a particular link label at the front part of the address code for implementation in hardware. Yum also discloses a Reverse Path address code that allows individual destination nodes

to retrieve the reverse path address without search the topology database and invoking any route computation program. (see Yum, Abstract, pages 1285 to 1287 and FIGS. 1-3)

Yum fails to teach or suggest "wherein said network node is configured to generate, for each of its offspring nodes, a respective updating information and to send said respective updating information to all offspring nodes...wherein the respective updating information sent to the offspring nodes differs for each offspring node based on the spanning tree structure", as recited, in part, in independent claims 25, 42, 26 and 49-52.

Therefore, Applicants submit that Cidon and Yum fail to teach or suggest all of the subject matter of independent claims 25, 42, 26 and 49-52. By virtue of dependency, Cidon and Yum also fail to teach the subject matter of those claims dependent thereon. Withdrawal of the rejection of claims 25, 28-40, 42-44, 46 and 47 are kindly requested.

The Office Action rejected claims 26-27, 41, 45, and 48 under 35 U.S.C. §103(a) as allegedly unpatentable as obvious over Cidon in view of Yum, and further in view of Neumiller, *et al.* (WO 00/70782) ("Neumiller").

As will be discussed below, Cidon in view of Yum, and further in view of Neumiller fails to disclose or suggest every claim feature recited in claims 26-27, 41, 45, and 48, and therefore fails to provide the features discussed above.

Cidon and Yum were discussed above. Neumiller is directed to a method and apparatus for performing selection within a communication system, where frames received by base stations are assigned a frame-quality indicator by the base station. The

frame-quality indicator is continuously backhauled to a switch or a radio access network router for routing a selected frame accordingly. (Neumiller, page 3, lines 7-22)

As noted above, Cidon in view of Yum fails to disclose or suggest every claim feature recited in claim 25, and similarly in claims 42 and 46. Neumiller fails to cure the deficiencies of Cidon and Yum. Specifically, Neumiller fails to disclose or suggest at least "wherein said network node is configured to generate, for each of its offspring nodes, a respective updating information and to send said respective updating information to all offspring nodes and where the information sent to the offspring node differs for each offspring node based on the spanning tree structure." Accordingly, Cidon in view of Yum, and further in view of Neumiller fails to disclose or suggest every claim feature recited in claim 25, and similarly in claims 42 and 46.

Claims 26-27 and 41 are dependent upon claim 25. Claim 45 is dependent upon claim 42. Claim 48 is dependent upon claim 46. Therefore, claims 26-27, 41, 45, and 48 should be allowed for at least their dependence upon an allowable base claim, and for the limitations recited therein.

For at least the reasons discussed above, Applicants respectfully submit that the cited references fail to disclose or suggest all of the elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 25-68 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

Kamran Emdadi
Registration No. 58,823

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Vienna, Virginia 22182-6212
Telephone: 703-720-7800
Fax: 703-720-7802

KE:sjm

Enclosures: RCE
Petition for Extension of Time
Additional Claims Fee Transmittal